

Notice of Allowability

Application No.

10/707,000

Examiner

Janis L. Dote

Applicant(s)

TOMITA ET AL.

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/31/05.
2. ☒ The allowed claim(s) is/are 1-4, 6-10 and 12-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/22/05; 8/16/05
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

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1. The examiner acknowledges the amendments to claims 1 and 23-27 and the cancellation of claim 11 set forth in the amendment filed on Aug. 31, 2005.

2. The examiner has considered the US applications listed on the "List of related cases" in the Information Disclosure Statements filed on Jun. 22, 2005, and Aug. 16, 2005.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Harris Pitlick (Reg. No. 38,779) on Nov. 4, 2005.

The application has been amended as follows:

Cancel claims 25-27.

4. The examiner's amendment canceling claims 25-27 avoids an objection to those claims under 37 CFR 1.75 as being substantial

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duplicates of claims 2, 23, and 24, respectively, as set forth in the office action mailed on May 26, 2005, paragraph 5.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

The objection to the specification set forth in the office action mailed on May 26, 2005, paragraph 4, has been withdrawn in response to the amended paragraph beginning at page 41, line 8, of the specification, set forth in the amendment filed on Aug. 31, 2005.

The rejections of claims 1-4, 6-9, 12-21, and 23-27 under 35 U.S.C. 102(a)/103(a) over US 2003/0152859 A1 (Emoto'859), as evidenced by applicants' admissions in instant specification at page 15, lines 13-14, at page 12, line 15, to page 13, line 10, and at page 18, line 6, to page 20, line 3, and of claims 21 and 22 under 35 U.S.C. 103(a) over US 5,430,526 (Ohkubo) combined with Emoto'859, set forth in the office action mailed on May 26, 2005, paragraphs 8 and 9, respectively, have been withdrawn in response to the amendments to claims 1, 23, and 24 set forth in the amendment filed on Aug. 31, 2005, and to the cancellation of claims 25-27 set forth in the examiner's amendment in paragraph 3, supra. Those amendments to claims 1,

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23, and 24 added the limitation of now-cancelled claim 11, that the toner has a "charge quantity of from 15 to 40 $\mu\text{C/g}$ and a charge quantity distribution such that a half width of a charge quantity distribution curve is from 0.5 to 4.0 $\text{fC}/\mu\text{m}$."

Emoto'859 does not teach or suggest that its toner has such a charge quantity as recited in instant claims 1, 23, and 24. Nor is there enough information on the present record to reasonably presume that the toners in Emoto'859 exhibit a charge quantity and a charge quantity distribution as recited in the instant claims. The prior art does not teach or suggest toner particles that satisfy the dimensional limitations and the charge quantity recited in the instant claims.

The rejection of claims 1, 6, and 18-21 under 35 U.S.C. 102(a)/103(a) over Japanese patent 2003-295494 (JP'494), and the rejections under 35 U.S.C. 103(a) of claims 2, 3, 12-15, 21, 22, 24, 25, and 27 under 35 U.S.C. 103(a) over JP'494, alone, or combined with the other cited references, set forth set forth in the office action mailed on May 26, 2005, paragraphs 10-13, respectively, have been withdrawn in response to the amendment to claims 1 and 24 as described supra, and to the cancellation of claims 25 and 27 set forth in the examiner's amendment in paragraph 3, supra. JP'494 does not teach or suggest that its toner has both the charge quantity and the

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charge quantity distribution as recited in instant claims 1 and 24. Nor is there enough information on the present record to reasonably presume that the toners in JP'494 exhibit both the charge quantity and the charge quantity distribution as recited in the instant claims.

The provisional rejections under the judicially created doctrine of obviousness-type double patenting set forth in the office action mailed on May 26, 2005, paragraphs 15-20 and 22-27, have been withdrawn in response to the amendments to claims 1, 23, and 24 described supra, and to the cancellation of and to the cancellation of claims 25-27 set forth in the examiner's amendment in paragraph 3, supra. The subject matter claimed in the cited US applications does not recite a toner having the charge quantity recited in the instant claims.

Claims 1-4, 6-10, and 12-24 are allowable over the prior art of record for the reasons discussed supra, and for the reasons discussed infra.

The following references, which are listed on the Information Disclosure Statement (IDS) filed on Mar. 23, 2005, were listed as "X" references on the European Search Report filed in that IDS.

EP 390,527 A is the European equivalent of US 5,329,795 (Yamashiro). Yamashiro does not teach or suggest a toner

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satisfying the dimensional limitations recited in the instant claims for the reasons discussed in the office action mailed on May 26, 2005, paragraph 3, pages 3-4, which are incorporated herein by reference.

EP 475,731 A2 (EP'731) teaches a spherical toner that satisfies the equation $b/a = 1 \text{ to } 1.5$, where "a" and "b" are the lengths of the minor axis and the major axis of the cross section of a toner particle as shown in Fig. 3 of EP'731. Page 4, lines 10-21. The ratio a/b is 1 to 0.67. The value of 0.67 is within the range of $0.5 \leq r_2/r_1 \leq 0.8$ recited in instant claims 1, 23, and 24, where r_2 is the average minor axis toner particle diameter and r_1 is the average major axis toner particle diameter. However, EP'731 does not disclose the thickness r_3 of the toner particle. Nor is there enough information in the reference to determine whether the EP'731 toner particles meet (a) the ratio $0.7 \leq r_3/r_2 \leq 1.0$ recited in instant claims 1, 23, and 24, where r_3 is the average thickness of the toner particle; or (b) the relationship $r_3 \leq r_2 < r_1$, recited in instant claims 1, 23, and 24. Moreover, EP'731 does not teach or suggest that its toner exhibits the charge quantity and charge quantity distribution recited in the instant claims. Nor is there enough information on the present record to reasonably presume that the toners in EP'731 exhibit such a

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charge quantity and charge quantity distribution as recited in the instant claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The central fax phone number is (571) 273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD
Nov. 4, 2005

Janis L. Dote
JANIS L. DOTE
PRIMARY EXAMINER
GROUP 1500-
1700